

OLD “NEW TOWNS” IN KOBE AND FUTURE PERSPECTIVES OF INHABITANTS IN SHRINKING DETACHED HOUSING AREAS

Case of Takakuradai in Kobe City

Hisako Koura

1. Introduction

A large amount of housing units was constructed in the suburban areas of Japan in the 1950s and 1960s in order to meet the needs of the rapid population growth, which often resulted in uncontrolled urban expansion. Owing to topographical conditions, however, Kobe retained its compact urban form between the Rokko mountain range and the Inland Sea, while the suburban areas developed behind the mountains are separated from the city center in which the urban functions are concentrated.

Census data from the year 2000 indicated that the ratio of the aged population in some of Kobe's suburban housing areas developed during this early stage of suburbanization was higher than the city average. A discussion on older “New Towns” has been initiated with a number of studies in order to understand the present situation and possible futures of these areas. This study focuses on the case of Takakuradai.

Depopulation, an aging population and abandoned lands and structures are today common planning issues in Japan. Suburban areas are no exception to this. The Kobe municipal government has recognized the challenge for providing public services when the density of these areas has become excessively low, but has not yet put forward possible solutions. The coming decade will be crucial in deciding the demographic future of Kobe's suburbs.

Among the largest cities in Kansai, which are Osaka, Kyoto and Kobe, Kobe is the only one that is required to seek a balanced policy to simultaneously deal with both urban regeneration and suburban issues within the city limits. Thus, the case study of Kobe touches upon various planning subjects that are relevant to the overall suburban discussion.

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2. *Background of the Suburban Development in Kobe*

Kobe, a major port town developed following the Meiji restoration, is located west of Osaka facing the Osaka Bay. Its narrowly urbanized area is limited on the north end by the Rokko mountain range and on the south by water. In the early 20th century, the Hanshin area between Kobe and the Osaka urban centers, with its mild climate and fresh air, was considered to be one of the most preferable residential areas in the region, as Osaka had undergone rapid industrialization accompanied with severe environmental pollution (Hanshin-kan 1997).

The development to promote urban expansion beyond the Rokko range towards the north and west began in the 1950s. Due to the topographical condition of Kobe, the local government had little choice but to develop the reclaimed land along the coast for industry and new housing projects behind the green mountains to cope with the rapid economic and population growth of the 1960s. During that period of growth, these developments significantly changed the natural topography and land use of the countryside located to the north of the mountains.

Land along the coast was reclaimed using earth and sand from the lower slope of the Rokko mountains at the north end of the urbanized area in order to provide room for industrial development along the coast, and at the same time to provide land for housing on the site from which a large amount of earth was taken. The Port Island project, a reclaimed island for modern port facilities and urban functions such as housing, pushed forward this idea at a large scale, exemplifying the city's so-called "mountain-to-sea" development strategy. Most of the earth and sand was taken from behind the Rokko mountains and carried through a tunnel to the other side of the mountains at the coast. (Kobe City 2005).

2.1 *Older Suburban Housing Projects*

Kobe's suburban areas have already been developed for residential use for around 60 years. Today, the expected depopulation of the older housing project areas is becoming a critical planning issue in some of them. Therefore, the Kobe municipal government has launched a case study¹ of the old suburban housing project areas in order to establish a new policy for suburban rehabilitation to deal with a gradual reduction in density.

In this study, Kobe has designated 51 housing projects which were inhabited by more than 1,000 people in 1985, as "older housing projects" (see Fig. 1) which will be examined for their future prospects. The survey is based on census data² and the condition of their settings.

¹ The Housing Department of Kobe launched case study research in Takakuradai with the collaboration of the community in 2014. This research is ongoing together with the community empowerment program.

² Data is based on the National Census, which is sum up within each housing project area, and the location, the background of the projects and development measures.

These 51 projects are classified into seven groups:

- G1. early developments on the lower hilltop of the Rokko mountains in the east;
- G2. the Hokushin (North Kobe) area along the Kobe Electric Railway line to Arima;
- G3. Suma New Town;
- G4. Suma/Tarumi area at the lower hilltop in the west;
- G5. Seishin (West Kobe) New Town;
- G6. the North Seishin area along Kobe Electric Railway line to Miki city;
- G7. The Seishin area, with a commuting relationship to Akashi city.

Early developments on the lower hilltop of the south side of the Rokko mountains (G1) were developed by the local public sectors (Hyogo Prefecture, Hyogo Housing Corporation, Kobe City), and the development areas are comparatively small. Their locations are very inconvenient for individuals without cars, even though the sites are located about ten minutes by car from urban functions and amenities and about 3 km from the nearest train station. The land price shrank by 60% from 1992 to 2002 (Kobe city data). They, however, had already undergone a positive development on the housing market based on the living quality of the area. Some communities autonomously set up collaboration with the public sector and private transportation services to provide new community bus services³.

Suma New Town (G3) was developed during the 1960s and 1970s, which was coincident with the start of the Port Island project's first phase⁴. As the reclamation of Port Island proceeded, a large area from which the earth and sand was removed for Port Island became ready for housing development, and for the first time, Kobe introduced the concept of a new town in its housing development, with the clear aim of developing a town

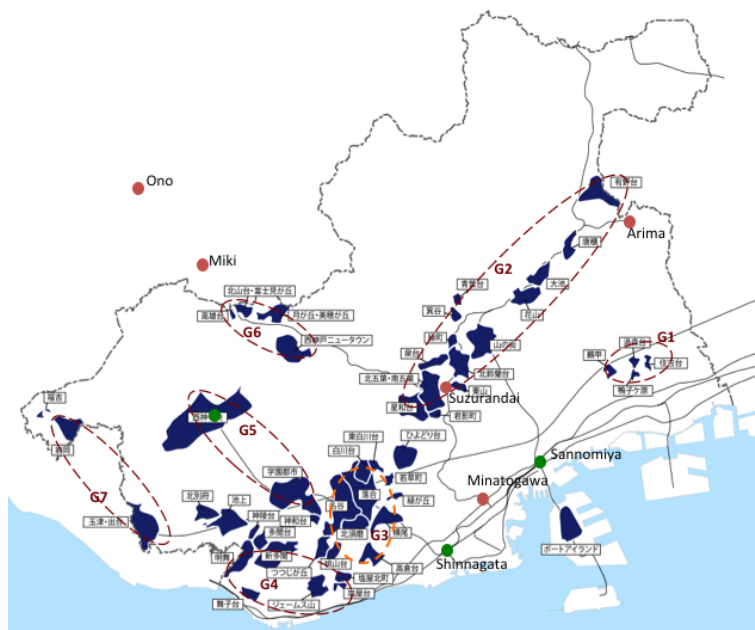


Fig. 1: Old Housing Projects in Kobe with railway lines (Source: Project (dark blue) map by Kobe City compiled 2014. Railway stations and Group information added by author.)

³ Kuru-Kuru Bus Service <http://www.kobe-machiken.org/kurukuru/kurukuru.htm>

⁴ The first construction phase of Port Island was from 1966 to 1980. The second and final phase was from 1986 to 2005

that was not just a satellite suburb composed of housing, but which also had a center providing daily commodities and social services with some commercial opportunities. Thus, the Suma New Town project was considered to be the first new town project in Kobe, guiding suburban development at an early stage.

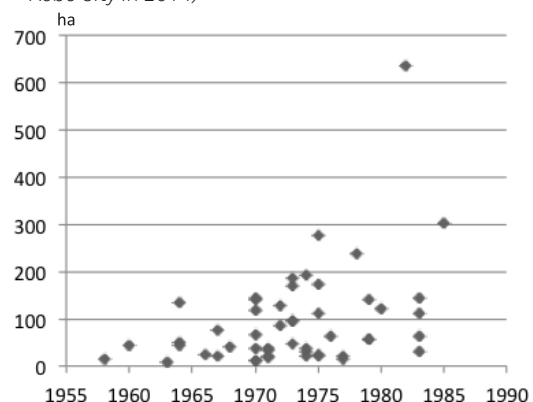
Following the development of Hokushin and Suma, housing projects were implemented in the Seishin area (G5). The Kobe municipal government presented the large-scale Seishin New Town project⁵ in the first Comprehensive Master Plan of Kobe in 1965 (Kobe 1965). The plan cited the purpose of the Seishin New Town project as preventing an excessive concentration of population and businesses in the already urbanized area, which comprised only 10% of the total city area, and to develop a new town that would function as a suburban center while conserving natural spaces. The project was implemented to prevent small developments from sprawling into green areas and resulting in inefficient investment and infrastructure shortages. The present plan foresees the development of a new city that will be equipped with various urban functions such as an industrial park, a social welfare center and an education and research complex, which each characterize their respective settlement clusters. The Kobe city subway was constructed alongside the new town projects, and completed to start the service between Seishin-chuo and Shin-Kobe shinkansen stations in 1985. This new town project is still ongoing.

2.2 The New Town Concept in Kobe

The new town concept in Japan has very much been influenced by the neighborhood unit theory of Clarence Arthur Perry (Perry 1929) in the United States, the Garden City concept of Ebenezer Howard (1902), and the new town policies in England. These concepts were translated into a Japanese style and have influenced the succeeding projects.

The development area and planned population of the housing projects in Kobe have varied as suburban development has proceeded (see Fig. 2). The larger projects have taken place in the later period. The planned population of the housing projects from the early stage of the 1950s and 1960s in the east and Hokushin was comparatively small and not large enough to form a neighborhood unit, which is considered to consist of an area with a single elementary school board. According to the neighborhood unit theory proposed

Fig. 2: Development area and construction time of Housing Project (Source: Projects data provided by Kobe City in 2014)



⁵ Seishin New Town is composed of three development areas: Gakuen-toshi, an education (university) complex, sport park, distribution center and housing; Seishin-South, composed of high-tech and bio companies as well as housing; and the Seishin-Central area of housing, including an industrial park. The development area, planned population, and construction time for each area are: Gakuen-toshi – 303 ha/20,000 residents/1980-2010; Seishin-South – 415 ha/35,000/1980-2015; Seishin-Central – 634 ha/61,000/1971-2012. The present population of each area has not reached the planned population.

by Perry, the Kobe municipal government considered a population of more than 10,000 to be necessary to develop the basic unit, which would consist of one elementary school and a community center including commercial functions and basic social services. New town projects in Kobe were grounded on this concept.

Suma New Town was initially developed without a final development plan, but the concept of the new town was introduced when the Shirakawadai and Kita-Suma housing projects were ongoing, Takakuradai had just started construction and three other projects had finished planning⁶. These were integrated under the concept of the Suma New Town. Thus, Suma New Town is a complex of six housing projects developed during the 1960s and 1970s. The total land area of the projects – Kita-suma, Takakuradai, Myodani, Ochiai, Shirakawadai and Yokoo – is 895 ha and twelve neighborhood units (Kobe City 2005).

Besides the centers of each neighborhood unit, the main new town center was developed in Myodani with commercial, cultural, business and administrative service functions. The importance of a social mix and public facilities for a good quality of living was discussed and different types of housing were provided with various open spaces to secure a social mix and a good balance between generations. However, in the early stage, the public transportation service was very poor and inconvenient. In 1977, the first subway service began between Myodani and the Shin-Nagata station in the coastal area, some ten years after people began to live in the Kita-Suma project area.

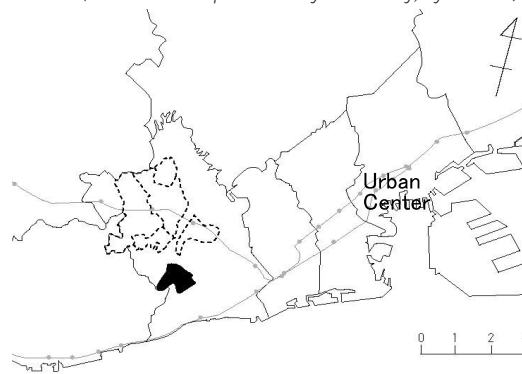
3. Case Study: Takakuradai

3.1 Detached Housing Area

Takakuradai, a housing project consisting of single neighborhood units of the Suma New Town, is isolated from the subway network (see Fig. 3) and is the most inconvenient location in the area in terms of mobility because of its topographical condition. This type of a location often results in vulnerability in the housing market. Takakuradai, in which a revitalization was expected thanks to a high ratio of aged individuals, would be more critical than other areas when the city of Kobe began working on the issues of its older new towns in the early 2000s.

Besides this inconvenience, the number of elderly individuals in Takakuradai is comparatively larger (31.9%, 2010) than the city average (22.6%). The number of people per household is also shrinking.

Fig. 3: Location of Takakuradai Housing Project Area (black) and the Suma new Town area (dotted line) in Kobe (Source: Data provided by Kobe City, by author)



⁶ "Basic Plan of Ochiai and Myodani Districts" Kobe city 1969, "Land-readjustment Project Plan of Shirakawadai" Shirakawadai Association 1966-1970, Yokoo project started in 1971 by Kobe city

These conditions along with poor public transportation service and demographic trends are generally considered as the essential risks for depopulation Japan's older suburbs (see also Yoshida and Fujii in this volume). By 2011, the population of Takakuradai had already declined to 70% of its peak in 1980. This demographic tendency had already been observed in Takakuradai since the beginning of 2000s (Figs. 4, 5), and case research was thus conducted in Takakuradai to examine the further possibility of shrinking.

3.2 Questionnaire Research from 2004 in Takakuradai

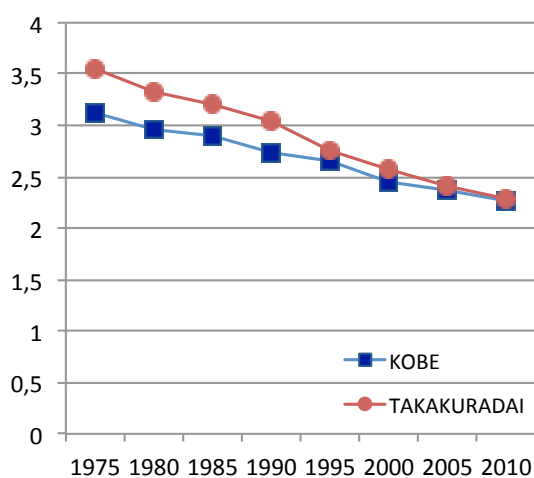


Fig.4: Number of people in the household
(Source: National Census)

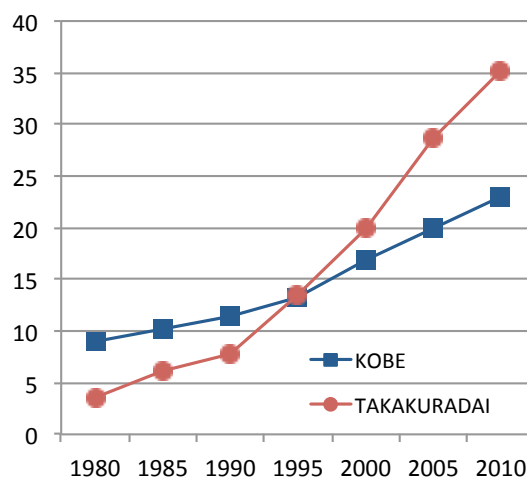


Fig.5: Ratio of the aged (Source: National Census)

1) Attachment to one's Hometown

Takakuradai is composed of detached housing, townhouses, multi-family housing and a community center (see Fig. 6). At present, the total number of housing units is 3,322, and most of these were built from 1972 to 1979, while 30.8% are units in detached housing. Research was focused on residents of detached housing, who are often assumed to show stronger attachment to their hometown than people occupying other housing types.

Questionnaire research was first conducted in 2004. The questionnaire was distributed by delivering randomly to the mailboxes of 505 households, covering about half of the total households. 233 of the questionnaires (46.1%) were returned. The answer sheets were to be returned by mail to the university research lab. The questionnaire consisted of single and multiple-choice questions asks the inhabitants about their place of residence and their present living conditions, their intention to continue living in their owned house, their property succession, and their profile.

58.9% of respondents were over 60 years of age. Residents in their 50s accounted for 23.6%, residents in their 40s for 8.6%, and the ratio of the respondents under 40 years old was only 3%. This corresponded with the duration of living in Takakuradai. 51% of respondents had lived in the same house for more than 25 years.

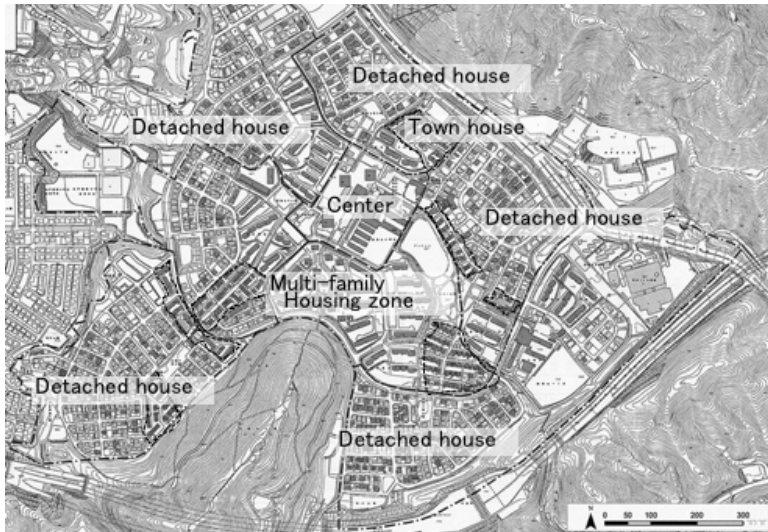


Fig.6: Composition of housing types in Takakuradai
(Source: Base Map from Kobe City)

The number of people in each household was shrinking. When residents first moved in their homes, the household size was four people (40%) or five people (27%) including children, but in 2004, this shrank to a couple (42%) or three people (27%), as Figure 7 demonstrates. Approximately 30% of households consisted of parents and children who were over 25 years old. The ratio of children who were dependent on their parents even after they started working was much higher than we expected. It was also surprising that over 60% of those who stayed in their parents' houses were over 30 years old.

Fig.7: Number of the people in the household
(Source: Koura 2004)

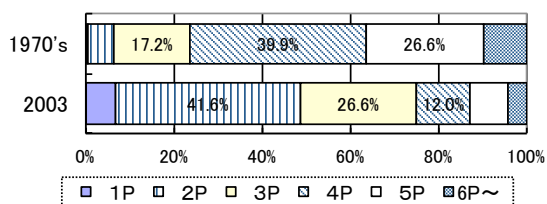
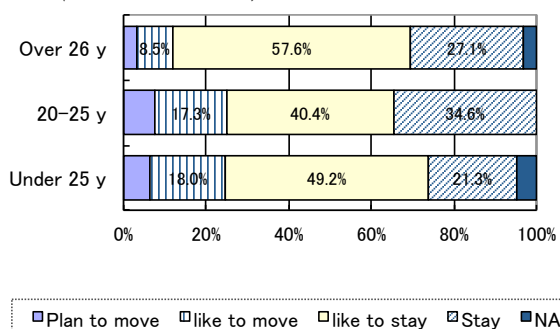


Fig.8: Residents' attachment to the home
(Source: Koura 2004)



The longer residents lived in Takakuradai, the higher their attachment became (see Fig. 7). Among those who had lived in the area more than 25 years, less than 12% of respondents had some motivation to move to other places to live. As residents became older, they preferred to stay at the place in which they lived. These persons, however, felt some apprehension to live alone and were concerned about the need for social care in the near future; thus, the ratio of those who had a clear intention to remain in their present home tended to shrink alongside age. These inhabitants were willing to stay, but were at the same time not confident and apprehensive of their own ability to take care of themselves.

2) Uncertainty of Property Management

The older generation of residents living in detached houses had a strong attachment to their homes, and only 18% of respondents had the intention to move out to another place to live. They did not, however, have any clear idea of how to deal with their houses if they could not manage to live there anymore.

According to the result of the questionnaire, about 50% of the owned houses would be inherited by the children, but 31% of them could possibly be abandoned in the future because the owners expressed that they had no idea of how to dispose of their owned property (see Fig. 9). Among the 50% of the aged owners who would like to transfer their houses to their children, only 36% of them expected that their inheritors, their children, would move into their houses, and 13% of them confirmed that their children would never live in them (see Fig. 10). Including 15% of those who did not fill in the answer to the question of whether their children would live in the inherited houses or not, more than 50% of those who planned to transfer their house to their children had no prospect for the future of their property (see Fig. 10).

To sum up, half of the owned houses in Takakuradai remained in very vague conditions without any specific plans by the owners for their properties. Therefore, planning strategies should be aware of the high risk of an increasing vacancy rate in the future should these houses be abandoned with little value on the housing market. The ownership transfer and/or housing market of an “old new town” remains very much unpredictable.

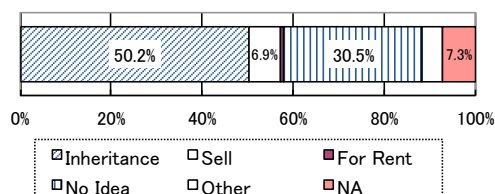


Fig.9: Owners' intention on Property transfer
(Source: Koura 2004)

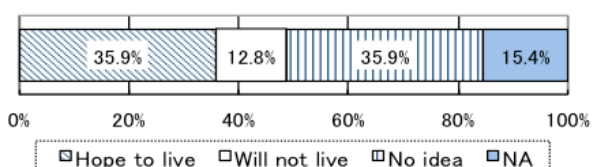


Fig.10: Future prospect of inherited property
(Source: Koura 2004)

3.3 Recent Challenges for the Vacancy

Since the number of vacant houses has been increasing in many places across Japan, these are becoming a threat to the safety and sanitary conditions of the country. In 2014, the Special Measures Act for Vacancy was enacted. Federal research estimated approximately 8.2 million vacant housing units across the country (2013) and that 401 of 1,718 municipalities had already set up legal ordinances to cope with the vacancy before the act was enacted. This demonstrates that vacancy is becoming a critical issue for local sustainability.

According to the Act of 2014, municipalities are expected to create a plan to deal with the vacancy based on field research, and also are encouraged to set up and maintain a monitoring database of vacancies to guide decision-making.

Hereby, the act defines a so-called specific vacancy rate as any structure that:

1. has risk to collapse and to be insecure,
2. becomes a severe threat to the sanitary conditions of the surroundings,
3. would damage the landscape without proper maintenance, and/or
4. is not acceptable to be left abandoned owing to a negative impact on the adjacent living conditions.

Local governments can recommend and order the owner to improve or eliminate the risk caused by this specific vacancy. If not happened, local governments are delegated the power to compulsorily clear the sites as well as to suspend the lower property tax connected with the residential use. These measures have just been enacted, and their efficacy has yet to be determined. However, as the law can only be applied on vacant structures, initial experiences already show that the tool is problematic in suburban areas, especially in cases in which it is difficult to ascertain whether or not a house is vacant or abandoned.

4. Current Demographic Change and the Community of Takakuradai

4.1 Demographic change

According to the census, the population of Takakuradai has constantly shrunk since 1980: 11,036 (1980), 10,802 (1985), 10,125 (1990), 10,007 (1995), 8,716 (2000), 7,943 (2005) and 7,521 (2010) (see Fig. 11). On the other hand, the number of households increased until 1995 to a peak of 3,633, after which it started to shrink. The number of households was 3,296 in 2010 (see Fig. 12).

Fig. 11: Population of Takakuradai
(Source: Data by National Census)

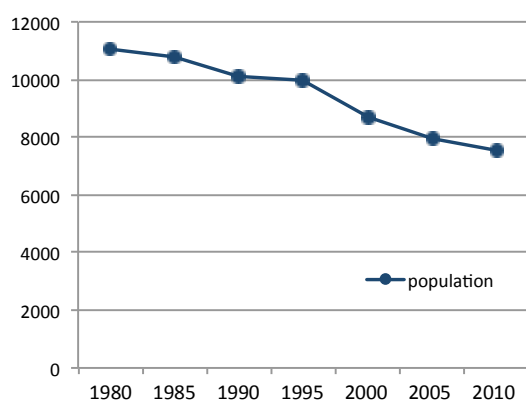
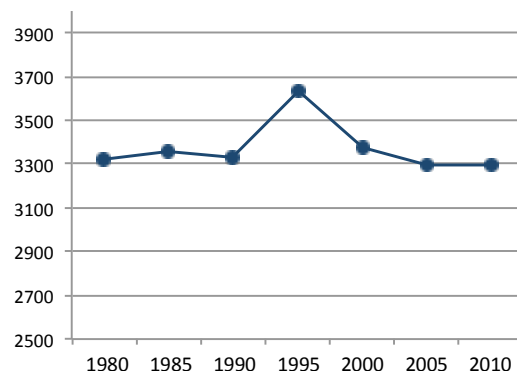


Fig. 12: Number of households in Takakuradai⁷
(Source: Data by National Census)



⁷ The number of households in 1995 was prominently large because they temporally accepted those who had suffered by Hanshin-Awaji Great Earthquake.

As Figure 5 demonstrates, compared with the city average, the increase in the ratio of older residents and decrease in the number of households have proceeded much faster in Takakuradai, and the decrease in households was already observable since 2000. For the older new town areas of Kobe, it is possible that the decrease in household numbers one of the sign of demographic shrinkage.

When people began to live in Takakuradai from 1975 to 1980, tow population peaks were observed in 1980 (see Fig. 13); one was 5 to 9 years old and the other 35 to 45 years old. This means that the most prominent household type was the young family composed of parents and children of kindergarten or elementary school age. These tow peaks of population were observed until 2000, even though both peaks became older and the volume of the younger generation was gradually decreasing, and the peak of the younger generation was no longer observed after 2010. This suggests that there have been few changes in the resident structure and that the original families remained and aged while their children moved out. This tendency is more apparent in the data of population volume than in the percentage data for each age group (Figs. 13, 14).

Fig. 13: Ratio of age group at census year
(Source: Suburban Projects data from Kobe City based on National Census)

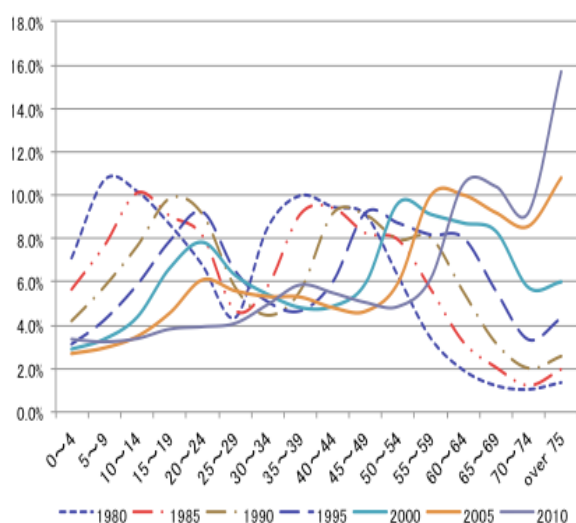
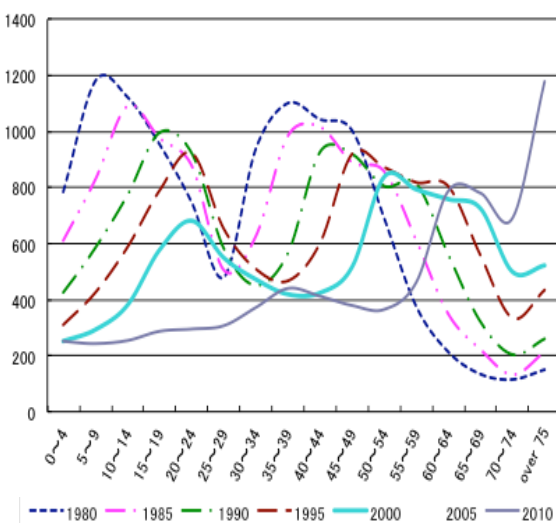


Fig. 14: Population volume of age group
(Source: Suburban Projects data from Kobe City based on National Census)



The ratio of residents over 65 years of age became higher than the city average in 2000, and has sharply increased since then. The ratio of residents aged over 75 years grew in 2005, and it suddenly now occupies a large proportion of the population. The data of the ratio of each of the age groups indicates that the population of the younger generation has kept decreasing since 1980. Only the older generation, that used to include young mothers and fathers when they moved to Takakuradai, has remained in the area.

A certain number of residents always move to and from a location, but this group is not large enough to alter trends in demographic change. For school and public facility management, a well-balanced population of each age group is favorable in terms of cost and sustainability. Thus, a high ratio of older people is a serious issue for Takakuradai's local facilities. There are many empty classrooms in the elementary school, but this space is hardly able to be used as a facility for the aged, because the school is under the jurisdiction

of the Ministry of Education, Culture, Sports, Science and Technology, while senior welfare is under that of Public Health. The difference in jurisdictions is always troublesome in projects to renovate vacant spaces. Besides this, the center of the neighborhood unit is also becoming outdated, as motorization is advancing, and the reorganization of the center function still shows few prospects.

4.2 Community Activities

Demographic change also affects activities in the community. One of the typical phenomena is a sharp decrease in the number of elementary school students. In 1985, there were 1,141 students at Takakuadai Elementary School, which decreased to 560 in 2010. The other is the effect on the workforce. In 1995, 4,622 residents (46.2% of 10,007) were working, and by 2010, this figure had shrunk to 2,904 (38.6% of 7,521). The structure of the places to which they commute to work is not much different between these two years (see Fig. 15). Most residents worked in either Kobe city (53.6% in 1995, 45.5% in 2010) or in Suma ward (22.7% in 1995, 29.0% in 2010). The recent reduction in the size of the workforce is mainly a consequence of residents retiring.

As residents become older, their mobility and daily communication patterns also deteriorate, and thus their concerns about social services and neighborhood affairs inevitably change. Referring to the result of questionnaire research from 2004 (Fig.16), an improvement in social welfare services for the aged was the most frequently mentioned concern.

This is understandable based on the demographic conditions. However, residents also expressed a necessity for security services, with some fear of living next to a vacant property. They view vacant houses with more suspicion than vacant lands, as vacant houses rather demonstrate the deterioration of the neighborhood environment.

Besides this, inhabitants saw a necessity for management services to clean up the neighborhood and take care of green spaces, because it was becoming hard for them to manage all the matters of the community by themselves. 47% of respondents of the 2004 questionnaire research answered that they joined community association activities. This participation level is enough to provide for autonomous care for community issues to some extent. However, the questionnaire result implied that, as the community members became older, they began to feel the need to outsource some of the activities that they used to manage by themselves, such as cleaning and tending to green spaces in the neighborhood and caring for other residents.

Fig. 15: Work Place to commute
(Source: Koura 2004)

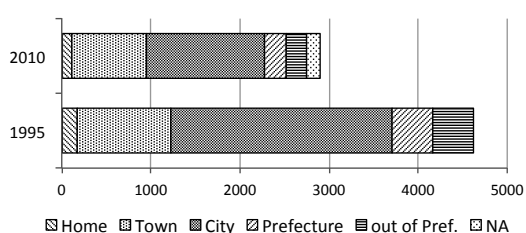
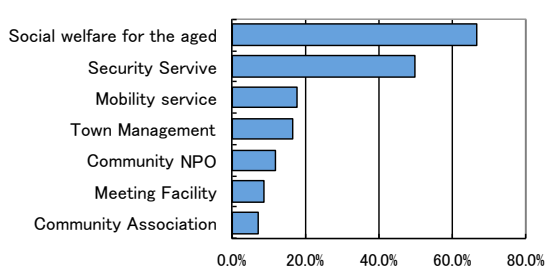


Fig. 16: Concerns of the residents in the community
(Source: Koura 2004)



5. Future Critical Issues of “Old Towns” in Kobe

5.1 Vacancy

Besides the reduction in the number of households, a high ratio of older residents and an increase in vacant houses are also suspected to be signs of shrinkage. According to the examination of 51 old housing projects by the City of Kobe, no correlation between the ratio of vacant houses and that of residents over 65 years of age existed in 2010 (see Fig. 17). The ratio of older residents of Takakuradai (red) is very high at 35%, but the vacancy ratio is very low at 5%. This means that older project do not always have higher vacancy ratios.

This is confirmed by the analysis of the relationship between the age of the developments and the housing vacancy ratio (Fig. 18). Three of the housing projects of the ten that were developed in the 1960s survive in a good shape, with less than 7% vacancy. At the same time, five of 34 projects developed in the 1970s have a high vacancy ratio of more than 15%. Projects that display a small vacancy rate are varied in size and also in terms of housing types. The project plan does not directly address the vacancy. The reasons for the differences in vacancy ratio have not yet been fully examined.

The age of the projects and the ratio of the older population are comparatively more strongly correlated (Fig. 19), but the ratio of the older population of the projects developed in 1960s is comparatively low. These older projects might be in a good condition to promote and maintain the balance of population inflow and outflow in order to stimulate housing renovation. Locational conditions such as the convenience of transportation and/or daily amenities and other environmental conditions seem to be positive factors for maintaining a good balance.

Fig. 17: Vacancy ratio and ratio of the aged
(Source: Suburban Projects data from Kobe City)

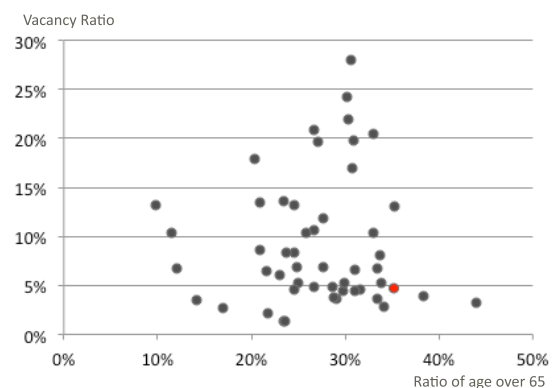


Fig. 18: Development year and vacancy ratio
(Source: Suburban Projects data from Kobe City)

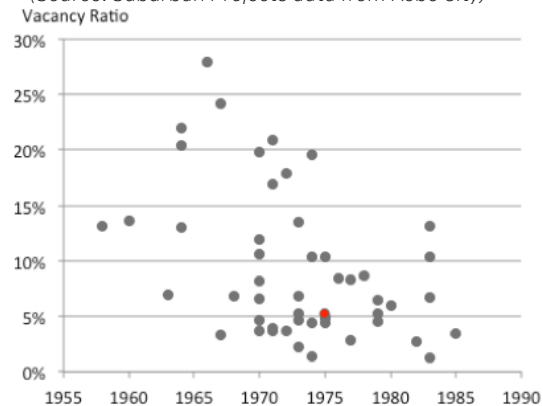
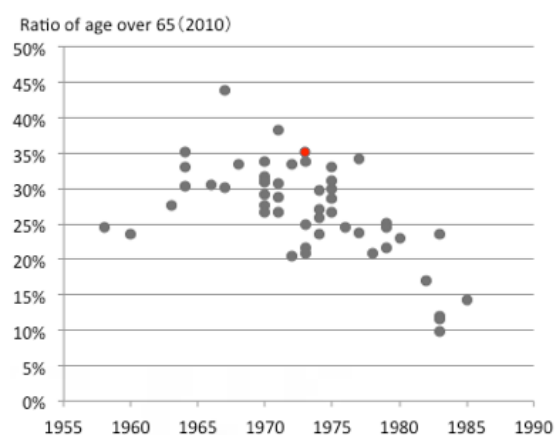


Fig. 19: Development year and ratio of the aged
(Source: Suburban Projects data from Kobe City)



Kobe has been working on the older housing project since the beginning of the 2000s, with concerns associated with the acceleration of demographic aging and an increase in vacancy rates. Statistics predict that between 2010 and 2020 the majority of those aged over 65 years will be about to become more than 75 years old. This makes the beginning of the millenium a grace period to set up a policy for shrinkage. Some communities in old projects concerned and autonomously worked on improvements in public transportation and social services by developing a community-based system which enhances the residential value of the areas and encourages people to move to the area. A balanced residential mobility is essential to such sustainability.

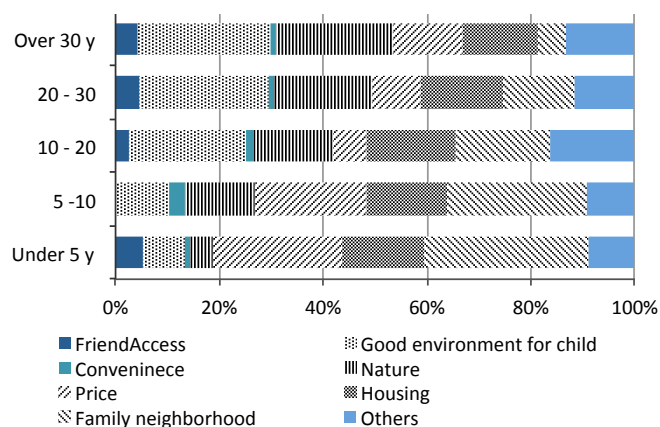
5.2 Community Autonomy and Generation Balance

Now that ten years have elapsed since the case research in Takakuradai, residents over 75 years of age have already became largest cohort in the community. The local government has begun to apprehend that an excessively aged society raises costs for social and health care, together with the unpredictable risks inherent in the conditions of the detached housing. The city set up the case trial in Takakuradai to facilitate community involvement and thus to discuss its own future. Currently, the city has just started to review the community's conditions through a series of workshops and a questionnaire in order to share the critical issues.

Through the questionnaire, it became clear that the evaluation of Takakuradai differs between residents who have lived there for long and those who moved in over the past years (see Fig. 20). The families who have lived there for a long time mostly appreciated the nature of the surroundings and the favorable conditions for childcare when they decided to live there. On the other hand, an appropriate housing price and the opportunity to live close to one's parents and relatives were the major reasons for those who moved in more recently.

For the first generation that moved in about 40 years ago, the suburban life was something new characterized by a modern lifestyle in green surroundings, which was more important than the price. After many suburban projects were completed and a suburban lifestyle became common, the price competition on the housing market became the determining factor for selecting one's place to live.

Fig. 20: Reason to move to Takakuradai
(Source: Koura 2004)



Most of the residents have a strong attachment to living in Takakuradai, but they also desire better public transportation, social and welfare services and commercial facilities. These responses reflect those of the last survey from 2004. They show that not much has been changed and improved since then. Today, the inhabitants hope that a younger generation would move in to modify the age group balance.

6. Discussion

The older housing projects that were built to cope with the urgent demand for a large number of housing units often lack commercial and social services, and some of them are separated from the public transportation network. Consequently, individual motorization is important for daily conveniences. The first generation of residents of the projects have become old and retired, and community autonomy is stagnating. When the residents were young and active, neighborhood associations took on the major role in dealing with the community affairs, such as maintaining streets and parks, led the community meetings and solved other problems that are now too demanding for the aged.

Gradually, the amount of older residents grew, followed by a population decline as their children moved out, and a decrease in the number of households likely increased neighborhood vacancy rates. These consequences are considered to be the signs of shrinkage.

However, these characteristics cannot always be observed at the same time, according to the data from the older housing projects in Kobe. In general, it is anticipated that an excessively aged society and vacancy occur due to a stagnating inflow of younger people, and that the abandonment of properties by the younger generation leads to a higher risk of shrinkage, which the local government should mainly deal with from the viewpoint of the efficiency of public services. The actual conditions of the projects in Kobe, however, are varied in three indices: the ratio of older residents, decrease in the number of households, and vacancy rate.

The reasons for this demographic decline are assumed to be much more complex and vary from project to project. Thus, a more careful examination is necessary to inform planning decision-making. For example, the need to live close to one's parents and/or relatives, which can be observed in Takakuradai, will be a new trend that might be able to deliver more sustainability. As the conditions of housing projects differ, it may be difficult to find a common solution, but it should be commonly acknowledged that excessive housing units exist during the current depopulation stages of the cities. A comprehensive plan is needed to reorganize housing projects and land use together with an individual examination of each older housing projects for future restructuring.

Regarding Suma New Town, the city of Kobe is the major developer and is thus now facing the necessity for a comprehensive plan that addresses at least certain restructuring measures. The eco-compact city concept has already been introduced as a main restructuring policy at the national level (MLIT 2009). The concept is to reorganize the regional structure to that of selected intensive cores networked by public transportation, while avoiding further sprawl with peripheral low-density quarters. This might just be an

ideal, but this spatial concept is not the only solution or the only efficient form. Regarding the amount of old housing units and their areas, strategies for the future of the existing low-density housing should also be discussed. As initial experiences show, the reality is not easy to change by regulating property rights alone. On the other hand, the subsidy system for a low-carbon society was established to focus on the dense regional cores, but does not address fundamental restructuring through any concrete measures.

In the Kobe case, as most of the older housing projects are located on the hillside or the tops of the low peaks on the foot of the Rokko mountain range, vacancy is considered to be also a social resource that can be positively used to reduce density and offer a chance to live in greener areas surrounded by open spaces. If this should become a strategy, related measures should be based on the identification of concrete projects for controlling land use. Land use control is institutionally possible through zoning, but it is quite difficult to implement in order to regulate private property rights any more strictly than in the present situation. In Japan, compulsory control over land use is possible as far as this serves the public good, but this is usually confronted by severe opposition during public consultations.

In some rare cases, the question of whether some housing projects should be closed down completely in order to pursue sustainable city management within the whole city will have to be discussed. To date, not enough data exist to support a comprehensive planning of such decisions at the city level or for the restructuring of particular areas. The main precondition for such actions, however, is the possibility to develop public planning measures that strengthen the common good by, among others, more efficiently managing property ownership rights.

Hisako Koura D.Eng., Professor, Head of Integrated Arts and Design Dept., Graduate School of Arts and Design, Kobe Design University. Studied Human Sciences at Osaka University and practiced urban planning mainly for the Osaka city government before starting to work at Osaka University, where she completed her doctoral degree. Recent research topics are: 1) landscape planning as a basis for development managemens, 2) cultural landscape and its sustainability, 3) urban spatial transformation under regional restructuring process. Registered urban and regional planner and committee member of Ministry of Land, Infrastructure, Transport and Tourism (MLIT) 2005-2014.

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⁸ Data used from Koura (2004) are based on a primary survey at Takakuradai by the Koura Study Lab. Project data from Kobe City were prepared by Kobe City Government for the discussion on Old Suburbia Projects Issues.